

PROCEEDINGS
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A NEW AUSTRALIAN PHLAEOTHIRIPIDAE
(Thysanoptera: Tubulifera)

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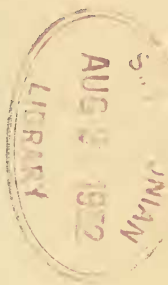
Urbana, Illinois

Through the kindness of Dr. William L. Brown, Jr., of the Museum of Comparative Zoology, I have had an opportunity to study a number of interesting Australian thrips. One of these thrips, *Amphibolothrips* (*Verrucothrips*) *caenosa* described herein, is apparently the second known specimen of the group formerly assigned to the family Urothripidae to be discovered in that continent. The other "urothripid" specimen is the unique type species of *Octurothrips* Priesner. Both are from Victoria.

According to Doctor Brown these two entities probably came from different ecological areas. Healesville, the type locality of *Amphibolothrips* (*Octurothrips*) *pulcher*, generally is more constantly moist throughout the year than is the Victoria Valley, the type locality of *caenosa*. Although it is not known whether *pulcher* was found at the base of the Victorian Alps or higher on the slopes that border Healesville, it is possible that both species are subject to similar temperature conditions, cool in the winter and extremely hot in the summer. Most likely the dissimilar rainfall distribution in the two localities is responsible primarily for the difference in their habitats.

Amphibolothrips Buffa 1909

Almost at the same time that *Amphibolothrips* and *Bebelothrips* were described by Buffa, Bagnall brought forth his genus *Urothrips*. To Bagnall these genera seemed so different from the other Tubulifera that he erected the family Urothripidae for them. Eventually this family was placed in a suborder of its own, Polystigmata. The group had hardly reached such high standing before its rank slowly began to fall. In 1915 it was reduced to a superfamily, the Urothripoidea. Meanwhile and since then, six more genera were proposed: *Stephanothrips* Trybom 1912, *Bradythrips* Hood and Williams 1925, *Trachythrips* Hood 1929, *Octurothrips* Priesner 1931, *Conocephalothrips* Bianchi 1946, and *Baenothrips* J. C. Crawford 1948. Finally in 1949 Priesner relegated Urothripoidea to Urothripinae as a subfamily of Phlaeothripidae. I prefer to de-emphasize the taxonomic category of these aforementioned genera still further and make them all subgenera of the genus *Amphibolothrips*. As such the genus *Amphibolothrips* would be at the apex of the phyletic line that contains as more primitive members *Hoodiana*, *Arcyothrips*,



Streptothrips, *Stegothrips*, and *Idiothrips*. If desirable the genera of this pyletic line could be grouped as a tribe of the family Phlaeothripidae.

Diagnostic characteristics of *Amphibolothrips*:

Head—eyes small, anteriorly placed; antenna four- to eight-segmented, with the fusion of the segments occurring between segments III, IV, and V and/or between segments VII and VIII; postocular setae minute; prominent anterior, dilated setae absent or present by one to three pairs.

Mouth parts—Mouth cones broadly rounded; maxillary stylets (laciniae) slender extended far into the head when at rest.

Thorax—always apterous; praepectal plates large to rudimentary to absent; mesopraesternum usually, possibly always, reduced in size; prothoracic epimeral sutures incomplete; suture between meso- and metasternum usually absent; hind coxa slightly more distant from each other than the middle pair are from each other; all tarsi usually, possibly always, one-segmented.

Abdomen—segment I without a differentiated notal shield, the entire notum uniformly sclerotized; segment IX much longer than segment VIII; prominent anal setae four or six in number, each seta three or four times as long as tube.

These warty, brown and yellow thrips have been found in the warmer parts of all of the faunal regions except the Oriental region.

The placement of the hind coxae, the reduction of all tarsal segments to one, and the lack of a differentiated notal shield on abdominal segment I are unique characteristics in the Tubulifera. *Hoodiana* approaches *Amphibolothrips* in respect to the hind coxae, in that, according to Faure 1933, the hind coxae of *Hoodiana* are as close to each other as are the middle coxae. *Arcyothrips* and *Idiothrips* resemble *Amphibolothrips* not only in general form, but also by the fact that the notal shield is large and nearly covers abdominal segment I.

Verrucothrips new subgenus

Antenna eight-segmented, segment VIII without pedicel and closely joined to segment VII, segment VI not closely joined to segment VII, segment III with an exceptionally long pedicel. Head with three pairs of prominent anterior setae; tube with four long anal setae. Maxillary stylets widely spaced within the head, not touching.

Type species:—*Amphibolothrips (Verrucothrips) caenosa* new species.

This subgenus and *Octurothrips* are the only two subgenera which have eight segments in the antenna. *Octurothrips* differs *Verrucothrips* as follows:

Antennal segment VI, VII, VIII closely joined appearing as a compact mass, fig. 2b; tube with six long anal setae, fig. 2a.....*Octurothrips*

Antennal segment VI not closely joined to segment VII, fig. 1b; tube with four long anal setae, fig. 1a.....*Verrucothrips*

Amphibolothrips (Verrucothrips) caenosa new species

Female (apterous): Length distended, exclusive of the antennae and setae, about 1.2 mm. General color brown with some yellow. Brown:

head, antennal segments I, IV to VIII, prothorax, legs, side of pterothorax, sides of abdominal segments I to IX, and tip of tube. Brownish yellow: median portions of the pterothorax and abdominal segments I to IX. Yellow: antennal segments II and III and most of tube. Red: subintegumental pigments of the head, thorax, and abdomen except the tube. These pigments are deposited along the sides of the head, along the sides of the abdomen, and throughout the prothorax.

Head, and prothorax, fig. 1c. Antennae, fig. 1b. Terminal segments of the abdomen, fig. 1a.

Holotype: female; Victoria Valley, Crampians Ra., Western district, Victoria, Australia; Sept. 25, 1951; (W. L. Brown, Jr.): from dead leafy branches of *Eucalyptus rostrata* in savannah woodland. Deposited in the collections of the Illinois Natural History Survey.

It seems worth while to mention that the trivial name, *caenosa*, was made feminine to agree with *Amphibolothrips*. Hinds and every other thysanopterist who followed him, including myself, have not been justified in considering *Thrips* and all generic combinations ending in thrips to be masculine. Clearly Linnaeus who first introduced the word thrips to zoological nomenclature ascribed to it the feminine gender. Even though the first *Thrips* species described by Linnaeus, *physapus*, seems to be a masculine adjective, actually it is not. Linnaeus took the name *Physapus* from De Geer and used it as a noun in apposition. His three other *Thrips* names were adjectives with feminine endings. Although thrips might have been considered to be masculine in Classical Latin, it does not necessarily follow that it was used as such in Medieval Latin. It seems best, therefore, to accept the gender employed by Linnaeus and continued in use by other zoologists for nearly 150 years.

REFERENCES

- Buffa, P. Contribuzione alla conoscenza dei Tisanotteri. Boll. del Laboratorio di Zoologia della R. Scuola Superiore d'Agric. in Portici, III:193. 1909, Jan. Original description of *Amphibolothrips*.
Priesner, H. Ein neues genus aus der familie Urothripidae. Konowia X:93. 1931. Original description of *Octurothrips*.

Explanation of Plate

- a—tube, b—antenna, c—head and prothorax
fig. 1. *Amphibolothrips (Verrucothrips) caenosa* new species.
fig. 2. *Amphibolothrips (Octurothrips) pulcher* Priesner. (redrawn from Priesner 1931).

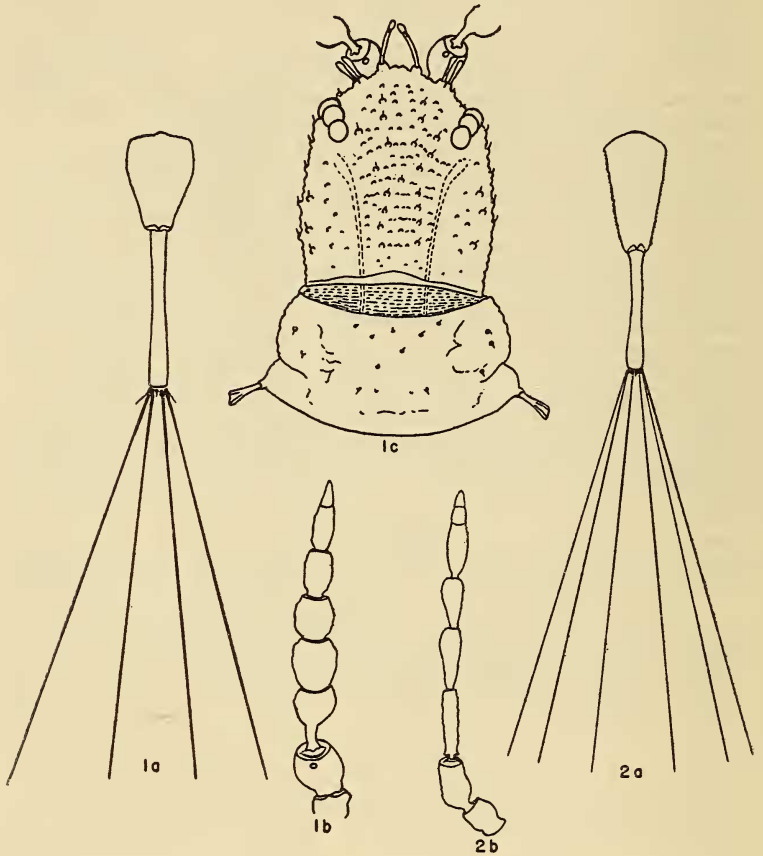


Plate VIII